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AMENDMENTS TO THE CLAIMS

In the set of claims within the Application, please amend the claims as hereinafter indicated.

1. (currently amended) An XDSL system comprising:
a hybrid circuit in operative communication with the remote end of a transmission line and also an XDSL modem associated with a subscriber premises, said hybrid circuit comprising a plurality of selectable impedance circuits; and
a switch for connecting each of said plurality of selectable impedance circuits in-line with said XDSL modem and also said remote end of said transmission line in response to a control signal[[.]]; wherein one of said plurality of impedance circuits has an impedance value equal to a characteristic line impedance of said transmission line without a bridged tap[[.]]; and wherein another one of said plurality of impedance circuits has an impedance value equal to a characteristic line impedance with a bridged tap.
2. (currently amended) The XDSL system of claim 1, wherein said XDSL system further comprising comprises a controller for producing said control signal as a function of a performance characteristic associated with each of said impedance circuits.
3. (currently amended) The XDSL system of claim 1, wherein the number of said plurality of selectable impedance circuits equals four.

4. (canceled)

5. (canceled)

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6. (currently amended) The XDSL system of claim 2, wherein said performance characteristic is a data transmission rate, and said control signal corresponds to the respective impedance circuit associated with the highest data transmission rate value.

7. (currently amended) A method of configuring an XDSL system, said method comprising the steps of:

providing a hybrid circuit in-line with the remote end of a transmission line and also an XDSL modem associated with a subscriber premises, said hybrid circuit comprising a plurality of selectable impedance circuits; and

engaging at least one of said plurality of selectable impedance circuits in-line with said remote end of said transmission line and also said XDSL modem in response to a control signal[[.]];

wherein the step of engaging includes the step of engaging serially each of said plurality of impedance circuits in-line with said remote end of said transmission line and also said XDSL modem;

determining a performance characteristic of said XDSL system for each of said plurality of impedance circuits when engaged[[.]]; and

outputting said control signal as a function of each ~~[[of]]~~ said performance ~~characteristics~~ characteristic; ~~[[and]]~~

wherein each said performance characteristic is a data transmission rate, and said control signal corresponds to a first respective impedance circuit associated with a data rate greater than a selected rate.

8. (canceled)

9. (canceled)

10. (currently amended) The method of claim 7, wherein ~~said performance characteristic is a data transmission rate and~~ said control signal alternatively corresponds to the respective impedance circuit associated with the highest data rate.

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11. (canceled)

12. (currently amended) The method of claim 7, wherein the step of outputting said control signal includes the step of comparing ~~each of said the~~ performance characteristics respectively associated with ~~each respective~~ said impedance circuit circuits.

13. (canceled)

14. (currently amended) A method of configuring an XDSL system, said method comprising the steps of:

providing a hybrid circuit in-line with the remote end of a transmission line and also an XDSL modem associated with a subscriber premises, said hybrid circuit comprising a plurality of selectable impedance circuits; and

engaging at least one of said plurality of selectable impedance circuits in-line with said remote end of said transmission line and also said XDSL modem in response to a control signal[[.]];

wherein the step of engaging includes the step of engaging seriatimly each of said plurality of impedance circuits in-line with said remote end of said transmission line and also said XDSL modem;

determining a performance characteristic of said XDSL system for each of said plurality of impedance circuits when engaged[[.]]; and

outputting said control signal as a function of each [[of]] said performance ~~characteristics~~ characteristic; [[and]]

wherein each said performance characteristic is a data transmission rate, and said control signal corresponds to a first respective impedance circuit associated with a data rate greater than a selected rate; and

wherein one of said plurality of impedance circuits has an impedance ~~values~~ value that is equal to a characteristic line impedance with a bridged tap.

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15. (currently amended) An XDSL system comprising:
a hybrid circuit in operative communication with the remote end of a transmission line and also an XDSL modem associated with a subscriber premises, said hybrid circuit comprising a plurality of selectable impedance circuits;
a switch for connecting each of said plurality of selectable impedance circuits in-line with said XDSL modem and also said remote end of said transmission line in response to a control signal; and
a controller programmed to (i) determine a performance characteristic associated with each of said plurality of selectable impedance circuits when connected[[],] and also (ii) output said control signal as a function of each said performance characteristics characteristic associated with each of said impedance circuits[[],];
wherein one of [[the]] said plurality of impedance circuits comprises a 460 ohm resistor in parallel with a 1200 ohm resistor and a 520 pF capacitor.

16. (currently amended) The XDSL system of claim 15, wherein the number of said impedance circuits is equal to four.

17. (currently amended) The XDSL system of claim 15, wherein said performance characteristic is a transmission data rate.

18. (currently amended) The XDSL system of claim 15, wherein said performance characteristic is a transmission line attenuation.

19. (currently amended) The XDSL system of claim 15, wherein said performance characteristic is a noise margin.

20. (canceled)